



February 6, 2023

Ms. Ann E. Misback  
Secretary, Board of Governors  
Federal Reserve System  
20<sup>th</sup> Street and Constitution Avenue, NW  
Washington, DC 20551

Principles for Climate-Related Financial Risk Management for Large Financial Institutions (Docket No. OP-1793)

Dear Ms. Misback,

Intercontinental Exchange, Inc. (“ICE”), on behalf of itself and its subsidiaries, appreciates the opportunity to respond to the Board of Governors of the Federal Reserve System’s (“Board”) draft principles for a high-level framework for management of climate-related financial risks.<sup>1</sup> ICE shares its thoughts as a provider of climate and ESG data that our clients find useful in the identification, measurement, and management of their climate-related financial risks.

Background on ICE

ICE offers a range of cross asset data and tools that provide a comprehensive view of sustainability issues across the market to help market participants uncover opportunities, manage risk, create impact, and meet compliance needs.

ICE’s Climate Physical Risk Data applies geospatial climate, economic and demographic data to specific U.S. municipalities, MBS pools, and related fixed income securities, allowing users to understand the risk of climate hazards such as heat stress, wildfire, flooding, hurricane, and drought on specific securities. A key feature of ICE’s data is its extensive coverage of U.S. municipal and MBS market, with CUSIP-level coverage of ~98% of the ~\$4T in outstanding municipal debt and ~95% coverage of the U.S. MBS universe. To allow for ease of comparison, scores are available. This transparency can help U.S. municipal and mortgage-backed security market participants make informed decisions on bonds or securities that may have high climate risk exposure.

In addition, ICE’s Geo-Analyzer is an on-demand module for assessing the potential climate risk for any user-provided location, providing a visualization and analytics solution that enables data-driven actionable insights for location-linked assets. Users can analyze climate and social features surrounding any specific location within the continental United States, regardless of the presence of any linked security. The Geo-Analyzer provides climate risk and demographic metrics at property-level. It can be used to analyze client provided locations, such

---

<sup>1</sup> <https://www.govinfo.gov/content/pkg/FR-2022-12-08/pdf/2022-26648.pdf>



as pre-securitized commercial properties, whole loan portfolios, and real estate holdings, and their respective associated location-backed securities.

The ICE Climate Transition Analytics tool integrates climate data and science-aligned analytics at a company, sector, and portfolio level, allowing users to identify, measure and understand climate transition factors within portfolio and loan books. Emissions and Targets Data can help companies and financial institutions understand the climate risk landscape, meet regulatory requirements, and capitalize on climate-related opportunities. Specifically, ICE's GHG Emissions Data provide a comprehensive time series (from 2010) of Greenhouse Gas Protocol defined Scope 1, 2 and 3 emissions covering 5,500 publicly reporting global companies, with modelled data available for 30,000+ companies. We have the capability to model data to expand the coverage to public and private companies (as utilized by the European Central Bank ("ECB")). ICE's Emission Reduction Targets Data incorporate over 9,000 reported targets covering ~2,500 companies, including targets aligned with the Science-Based Targets Initiative (SBTi) temperature scoring methodology. Emission reduction targets data can help financial institutions understand climate transition risk. The data support sophisticated analytical solutions such as avoided emissions, implied temperature rise metrics and transition pathway alignment.

Because financial institutions need to be aware of how longer-term policy changes and market dynamics could impact near term measurement of physical and transition climate risks, ICE constructs climate risk analytics that can explore short-term impacts as well as long-term horizon analysis (up to the year 2100 per well-established climate scenarios).

ICE has extensive experience working with regulators with regards to analyzing climate-related risk, including the ECB, the European Securities Markets Authority ("ESMA"), the Central Bank of Portugal, and the International Monetary Fund, among others. For example, we provided the ECB with ICE Climate Transition Data and expertise for the publication of their September 2021 Occasional Paper Series titled "ECB Economy-wide Climate Stress Test,"<sup>2</sup> and continue to work with them on methodological updates to the climate risk stress testing framework (e.g. the introduction of the NGFS<sup>3</sup> Phase 3 scenarios).

This experience makes us well positioned to share our view on the Board's draft principles.

### Scenario Analysis of Climate-Related Financial Risks

The draft principles recognize that climate-related scenario analysis is emerging as an important approach for identifying, measuring, and managing climate-related financial risks. ICE notes that there are well understood climate scenarios tools available today to the industry which may be useful to be noted by the Board in its principles. For example, the United Nation's Intergovernmental Panel on Climate Change (IPCC)<sup>4</sup> has established

---

<sup>2</sup> Alogoskoufis, S., Dunz, N., Emambakhsh, T., Hennig, T., Kaijser, M., Kouratzoglou, C., ... Salleo, C. (Sept. 2021). *Occasional Paper Series: ECB economy-wide climate stress test - Methodology and results* (No 281). European Central Bank. <https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op281~05a7735b1c.sv.pdf>. Please note that ICE acquired Urgentem in 2022, the entity cited in this ECB paper.

<sup>3</sup> Network for Greening the Financial System. Information on the NGFS Phase 2 scenarios is available at <https://www.ngfs.net/ngfs-scenarios-portal/>

<sup>4</sup> The IPCC was established in 1988 and is comprised of 195 member states. Information on the IPCC is available at <https://www.ipcc.ch/>



the Representative Concentration Pathway (RCP) and Shared Socioeconomic Pathways (SSP), exploring different assumptions within the alignment to various temperature scenarios (such as the reliance or not on negative emission technologies). ICE believes that it is best practice to incorporate these types of standardized, readily available scenarios into financial institutions' scenario analyses workflows and we support the Board's use of these established parameters.

The principles also suggest that supervised banks include multiple time horizons when assessing the materiality of their climate-related financial risks. We believe it is best practices for a financial institution to consider a wide array of climate exposure time horizons, including time horizons that extend well beyond the term or tenor of a particular bank holding, as the exposure can often outlive the asset (e.g. reputational risk, or rolling exposures), when measuring the materiality to the firm.

#### Additional Tools and Approaches for Risk Management of Climate-Related Risks

The Board discusses various risk management tools that are available today to financial institutions, including exposure analysis, heat maps, climate risk dashboards, and scenario analysis under the risk management principle. ICE believes that all of these tools add value to an institution's analysis and management of climate-related risks. For example, dashboards and heat maps can help senior managers understand the potential financial impact of climate risk, whereas exposure and scenario analyses provide the necessary detail to managers working to measure and mitigate such risks.

From our experience as a climate risk data provider, we strongly believe that the underlying thread that ties these tools together is the validation of underlying assumptions utilized. We regularly have clients asking us to validate and compare our projections to actual outcomes once realized. As outlined above, using common best practice models and scenarios will allow financial institutions to be transparent.

#### Conclusion

ICE appreciates the opportunity to share our thoughts on this important topic, and hope that our recommendations are helpful as the Board develops a framework for the safe and sound management by large financial institutions of their exposures to climate-related financial risks.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Anthony Belcher", written in a cursive style.

Anthony Belcher, Vice President, Sustainable Finance  
Intercontinental Exchange, Inc.